BMM CERTIFICATION TEST REPORT

Report Issue Date: 6th January, 2015

Jurisdiction Issued To: Georgia Lottery Corporation

Issued By:
BMM Testlabs
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Manufacturer:
Primero Games, LLC
2150 Northmont Parkway, Suite N,
Duluth, GA 30096

Compliance Certification for:

Game Firmware : The Best of Nudge v2.10 Firmware ID:65B03D0A

Reference Numbers:

BMM: PRIM.1005

Report Number: PRIM10051GA_Lottery

BMM CERTIFICATION TEST REPORT

1. STANDARD TESTED TO/RESULT

Technical Standard used for Compliance Evaluation:	Test Result	
	Pass	Fail
Georgia COAM SAS Requirements v1.6	☑	❑

2. SCOPE

Primero Games LLC has requested BMM Testlabs to certify the interoperability of the The Best of Nudge v2.10 Firmware ID: 65B03D0A with the Intralot system. This report provides testing results of the ability for this software to accurately communicate and record transmitted data as required by the Intralot system.

The following SAS features were tested to evaluate the correct implementation of the SAS protocol for use with the Intralot system.

1. Long Polls
2. Meters
3. Events

3. COMPLIANCE CERTIFICATION DETAILS

3.1. Game Software Version Details:

The following table details the relevant information for the game Best of Nudge v2.10 that has been certified as compliant to the aforementioned jurisdictional Technical Standards:

Game Name	File Name	SHA-1 Signature via BMM Signature v2.0	CRC16 with Seed value "0000"	CRC16 with Seed value "FFFF"
The Best of Nudge	X-PG-BEST-OF-NUDGE-SAS-MG-HR_2-10-65B03D0A.bin	7BC7EE8F091065B20D7C4370A9B7EF35FEB6B7AB	0F03	EC19

***Note**: Refer to Section 3.3 for verification tools used.*

3.2. Additional Game Program Notes:

- **Compatible Motherboards**:

  The game The Best of Nudge Firmware ID: 65B03D0A certified within this report is compatible with the CFX340, MAX340 and FOX340S-4M motherboards.
- Appendix 1 gives the details of the supported game and system Intralot functionality.

3.3. Software Signature Verification Information:

Signature Verification Application:

(1) The SHA-1 signatures were calculated and verified using the BMM Signatures proprietary verification tool, which has been calibrated in accordance with ISO/IEC 17025 sections 5.5.2, 5.5.a, 5.5.c, and 5.5.8; as well as ISO/IEC 17020 sections 9.4, 9.6.b, 9.13.a, and 9.15.

(2) Where requested, BMM will supply the regulator/operator with BMM's proprietary verification tool "BMM Signatures" for verifying the SHA-1 details above. A user manual will also be supplied.

Signature Verification Procedure:

Using BMM Signatures v2.0

- Install BMM Signatures v2.0 on the computer to be used for software verification and double click on the "BMM Signatures 2.0" icon.
- The BMM Signatures program will open.
- Copy the file to be verified into the computer with BMM Signatures.
- Select the "Files/Folders" tab.
- Select the "browse files" button in BMM Signatures.
- Navigate to the appropriate directory and select the files shown in Section 3.1 of this report.
- Select the "Open" button from the window.
- Click the desired algorithm to use (e.g. SHA1). When the program is completed, the signatures will be displayed in the Output window.
- Verify that the software file signatures obtained match those listed in Section 3.1 of this report.

Using SAS Long Poll command to verify CRC16 signature

- Setup the game for SAS.
- Send long poll command '$21 = ROM signature verification'.
- Enter two (2) bytes seed "0000" and "FFFF" one at a time.
- Wait until CRC16 signature is generated.
- Verify that the ROM signatures obtained match those listed in Section 3.1 of this report.

4. TERMS AND CONDITIONS

BMM Testlabs (BMM) has conducted a level of testing of the gaming product which has historically been adequate for a submission of this type. However, inherent in testing in a laboratory environment are the unavoidable limitations of it not being possible to verify the effects of all possible configurations and environments that occur in actual gaming venues.

This certification report is for use by the named jurisdiction and only certifies the gaming product described in the report subject to any conditions or limitations set forth therein.

The manufacturer named in the report is solely responsible for possession of the appropriate license to sell, lease, service or provide gaming supplies or gaming related services in the jurisdiction for which this product was tested. It is the responsibility of the manufacturer and operators to ensure that the gaming product certified in this report is maintained and operated correctly without defects and safely within the venue environment.

This report shall not be reproduced, except in full, without the written approval of BMM. Upon request by an authorized party, BMM will send this recommendation for certification report via email as directed. BMM takes the precautionary measures to secure the “PDF” document but BMM does not send the email via any encrypted methodology if requested by an authorized party.

Please feel free to contact BMM Testlabs if you have any questions in regards to this certification report.

Yours sincerely,

Travis Foley
Executive Vice President, Operations
BMM Testlabs

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Appendix 1

Functions of Intralot Supported by the Software

Georgia COAM SAS Requirement	Supported	Pass	Fail
COAM can be configured to remain enabled and playable when not connected to the CMS	✓	✓	
COAM sends exception 70 as required by the SAS protocol	✓	✓	
COAM allows cash out while disabled by the CMS	✓	✓	
Long Poll $21 Response Time is under seven (7) minutes	✓	✓	
COAM can be configured with a machine address within the range of 1-127	✓	✓	
COAM can be configured with the base accounting denomination of $0.01	✓	✓	
COAM Supported Long Polls			
0x01 Shutdown (lock out play)	✓	✓	
0x02 Startup (enable play)	✓	✓	
0x0E Disable real time event reporting	✓	✓	
0x0F Send meters $10 through $15	✓	✓	
0x19 Send meters $11 through $15	✓	✓	
0x1F Send Gaming Machine ID and Information	✓	✓	
0x21 ROM signature verification	✓	✓	
0x2F Send selected meters for game n	✓	✓	
0x51 Send total number of games implemented	✓	✓	
0x53 Send game n configuration	✓	✓	
0x54 Send SAS version ID and gaming machine serial number	✓	✓	
0x55 Send selected game number	✓	✓	
0x56 Send enabled game numbers	✓	✓	
0xA0 Send Enabled Features	✓	✓	
COAM Supported Meters			
0000 Total Coin In	✓	✓	
0001 Total Coin Out	✓	✓	
0002 Total Jackpot credits	✓	✓	
0003 Total hand paid cancelled credits	✓	✓	
0004 Total cancelled credits	✓	✓	
0005 Games Played	✓	✓	
0006 Games Won	✓	✓	

Georgia COAM SAS Requirement	Supported	Pass	Fail
0007 Games Lost	✓	✓	
000B Total credits from bill accepted	✓	✓	
000C Current credits	✓	✓	
0016 Total ticket out	✓	✓	
001C Total machine paid paytable win, not including progressive or external bonus	✓	✓	
001D Total machine paid progressive win	✓	✓	
001E Total machine paid external bonus win	✓	✓	
001F Total attendant paid paytable win, not including progressive or external bonus	✓	✓	
0020 Total attendant paid progressive win	✓	✓	
0021 Total Attendant Paid External Bonus	✓	✓	
0022 Total won credits	✓	✓	
0023 Total Hand paid credits	✓	✓	
0024 Total drop	✓	✓	
0040-0057 Total number of X bills accepted	✓	✓	
COAM Supported Event Reporting			
Power Resets or power failure:			
17 AC power was applied to gaming machine	✓	✓	
18 AC power was lost from gaming machine	✓	✓	
Handpay conditions (COAM jackpot, Cancelled credit handpay, Progressive Jackpot):			
51 Handpay is pending	✓	✓	
52 Handpay was reset	✓	✓	
Door Openings (any door that accesses a critical area of the COAM)			
15 Card cage was opened	✓	✓	
16 Card cage was closed	✓	✓	
98 Power off card cage access	✓	✓	
Operator Menu			
3C Operator changed options	✓	✓	
COAM Low RAM Battery:			
3B Low backup battery detected	✓	✓	
Buffer Overflow:			
70 Exception buffer overflow	✓	✓	

Georgia COAM SAS Requirement	Supported	Pass	Fail
Meter Reset:			
7A Gaming machine soft meter reset	✓	✓	
Events – Applicable			
All SAS events supported based on hardware configuration of the COAM	✓	✓	